

## ATPAC UPDATE

### AREA OF CONCERN 117-1

10/5/04  
SAFETY: No

#### **SUBJECT: Definition of the term “Airborne”**

**DISCUSSION:** Pilot reports to ALPA have made us aware that some ATC Towers are applying an unusual definition of “airborne.” The definition being used is that an aircraft is “airborne” when the aircraft rotates and the nose wheel comes off the ground. The significance of the definition relates to an aircraft landing or departing behind another aircraft that is departing from the same runway. FAA Order 7110.65, paragraphs 3-9-6 and 3-10-3, Same Runway Separation, permit controllers to apply minimum distances between succeeding arriving or departing aircraft if the controller can determine distances by reference to suitable landmarks and the other aircraft is airborne.

The “rotation” concept is used to enhance capacity, according to one tower support specialist. This is based on the idea that, at least in the case of Category III aircraft, the aircraft is beyond the maximum abort speed and the takeoff will occur. Another stated reason was that an arrival aircraft will not touch down immediately after crossing the landing threshold and the other aircraft will be “in the air,” i.e., all parts of the aircraft separated from terra firma, before the arrival touches down.

**SUGGESTED ATPAC ACTION:** Discuss the need for including a definition of airborne in the Pilot/Controller Glossary and make an appropriate recommendation.

**117**—Pilot feel they are being pushed too much and it is a safety issue. Comment made that pilot learn they can’t cross the threshold with another aircraft on the runway. Suggested possible solutions were MBI, procedures telecon for discussion. Update will be provided when available.

**118**—What exactly defines airborne? Nose wheel off, all wheels off? Should this be standardized and publicized? One member indicated that a number of court cases said it should be “all wheel off.” It was noted that if it is “all wheels,” then capacity would be affected. Noted that pilots would be concerned with the legality of “should they have made the landing.”

Discussion posed solution of an ATB, a PCG changes, etc.

**Recommendation #1: A definition of “Airborne” should be put in the Pilot Controller Glossary.**

**119** - AFS has not finalized the definition. Draft DCP will be provided when available.

**120** - ATO-T's consensus is that the definition should be when "all wheels are off the ground." Memo sent to AFS-200 on whether they agree with ATO-T.

**121** - ATO-T feels that all wheels off the ground is airborne. An MBI is under draft.

Should we be validating this first? How does AFS define airborne? Can we assume that current practices have acceptable risk? Recommendation that this issue be tabled until an SMS analysis and evaluation/study can be accomplished.

**122** - ATO-T says the definition is wheels off the ground. Recommendation #1 will be implemented.

**123** - ATO-T provided language for the new definition, which will go out for comment. Question was raised about looking into the possibility of changing the language to be "nose wheel off." Perhaps a safety study/risk assessment can be done that will allow some form (e.g. category of aircraft) of this application. ATO-T will research this question through AFS.

**124** - This recommendation in SRM process now with AOV per Dave Madison.

**125** - AOV is still in the process of determining if the raising of the nose wheel alone meets safety requirements.

**126** - This item was not discussed at this meeting. Steve Alogna will check into status and report at 127.

**127** - The status of this item was not determined.

**128** - A DCP is being circulated defining "airborne" as all parts of the aircraft off the runway.

**129** - Discussion was that this item is in DCP status or in-line for an SRMD.

**130** - Jesse Gaines advised via email that DCP is still active but not complete.

**131** - The recommended action from ATPAC to define airborne has been concluded as being all parts of the aircraft must be in the air.

**132** - Ms. Rose reported that the publication date for this change was missed and will be picked up in the next cycle.

**RECOMMENDATION #1: A definition of "Airborne" should be put in the Pilot Controller Glossary.**

**CURRENT STATUS: CLOSED**